

ABSTRACT OF THE DISCLOSURE

Disclosed herein is a biodegradable and bioactive glass-ceramic fabricated by mixing a slowly biodegradable glass-ceramic and a highly biodegradable glass-ceramic in a predetermined mixing ratio wherein the bioactivity is maintained to be constant, and the biodegradation rate is controlled by the mixing ratio. The biodegradable and bioactive glass-ceramic is fabricated from a composition consisting of calcium oxide (CaO), silica (SiO₂), boron oxide (B₂O₃), magnesium oxide (MgO), calcium fluoride (CaF₂) and phosphorus pentoxide (P₂O₅).